



August 27, 2010

Ms. Jan Christner
URS Operating Services (UOS)
1099 18th Street, Suite 710
Denver, CO 80202-1908

Subject: Rico Argentine Mine; Dolores River Analysis

Dear Jan,

Thank you for your request for a proposal to assist with the characterization of Dolores River flood conditions adjacent to the Rico Argentine Mine tailings pond near Rico, CO. We understand that your client desires better definition of the 100-year flood flow in the Dolores River at a location adjacent to the mine tailings dam. The existing Dolores River FEMA floodplain in the vicinity of Rico for the Dolores River is a Zone A floodplain, based on approximate methodologies. Attached is a proposed scope of services and cost estimate for this work.

Scope of Services

Site Hydrology - I have reviewed portions of the document, *Watershed Plan for the East Fork of the Dolores River in Dolores County (2006)* prepared by Grayling Environmental. This document assigns a flowrate of 2,800 cfs for the Town of Rico based on a regression equation provided by the CWCB in 2000. URS proposes to review the applicability of this approach based on the location of the tailings dam. URS also recommends investigation of other applicable regression equations and extrapolation of regional stream gage data to provide additional refinement to the expected 100-year flow rate at this site.

Site Hydraulics - I plan on making a site visit for the purpose of survey and field investigation in the vicinity of the tailings dam. I anticipate surveying three representative cross-sections of the river near the tailings dam. Since I will be traveling alone, I understand that I will be able to coordinate with a client representative at the site to assist with the survey effort. It is not known whether full cross-sections can be taken based on flow and depth conditions in the stream at the time. If the entry into the stream is not considered safe, approximations of depth of the underwater cross-section will be made. The site visit will also allow for evaluation of river conditions related to river form and roughness of the river bottom and banks. A photo log will also be provided. The cross-sectional information along with the site hydrology will be used to develop a flow-stage relationship that can be used to assess the flow depths at the 100-year flow rate.

Tailing Ponds Inspection - A site inspection of selected upper tailing pond embankments will be performed. The inspection will serve to document visible surface

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deficiencies and other conditions that appear to be related to embankment stability. It should be noted that a thorough assessment of tailing pond stability requires subsurface investigations, borings and a detailed monitoring program. The site inspection will focus on drainage patterns, evidence of subsidence, erosion, and seepage but will not be conclusive related to ultimate embankment stability.

Technical Memorandum – URS will prepare a technical memorandum providing the results of the above analyses. The memorandum will provide better definition for the 100-year flow conditions. It should be noted that these results will not be equivalent to a major river flood profile investigation, but will provide an improved definition as compared to the existing FEMA Zone A floodplain.

Hour and Cost Estimate

The table below breaks out the tasks and provides an hour and cost estimate.

Task	Staff	Title	Hours	Rate*	Cost
Hydrologic Investigation	Bob Christensen, PE	Specialized Labor	8	Ex. 4 CBI	
Field Inspections (including travel time)	Bob Christensen, PE	Specialized Labor	24		
Hydraulic Calculations	Bob Christensen, PE	Specialized Labor	8		
Pond Embankment Report	Bob Christensen	Specialized Labor	6		
QA – Detail Check – H&H	Kimberley Pirri, PE	Senior Engineer	4		
QA- Detail Check – Embankment Inspection	Brad Rastall, PE	Specialized Labor	4		
QA – Independent Technical Review	John Griffith, PE	Specialized Labor	4		
Travel Expenses**					
Total					

* Specialized Labor Rates based on multiplier of 2.46

** Includes lodging, meals and vehicle expense

Thanks again for the opportunity to provide this proposal. I am able to schedule this site visit at your convenience, but have a few dates in early September unavailable.

Sincerely,
URS Corporation



Bob Christensen, PE
Senior Water Resources Engineer